

WHAT IS CLAIMED IS:

1. Hybrid maize seed designated 37Y15, representative seed of said hybrid 37Y15 having been deposited under ATCC accession number _____.
2. A maize plant, or its parts, produced by the seed of claim 1.
3. Pollen of the plant of claim 2.
4. An ovule of the plant of claim 2.
5. A tissue culture of regenerable cells of a hybrid maize plant 37Y15, representative seed of said hybrid maize plant 37Y15 having been deposited under ATCC accession number _____, wherein the tissue regenerates plants capable of expressing all the morphological and physiological characteristics of said hybrid maize plant 37Y15.
6. A tissue culture according to claim 5, the cells or protoplasts being from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
7. A maize plant, or its parts, regenerated from the tissue culture of claim 5 and capable of expressing all the morphological and physiological characteristics of hybrid maize plant 37Y15, representative seed having been deposited under ATCC accession number _____.
8. The maize plant of claim 2 wherein said plant is male sterile.
9. A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 2 as a source of said breeding material.
10. The maize plant breeding program of claim 9 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing,

pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

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11. A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant or its parts, of claim 2, said maize plant capable of expressing a combination of at least two 37Y15 traits selected from the group consisting of: excellent yield potential, strong stalks, strong roots, good silage yield potential, suited to the Northcentral region of the United States, and a relative maturity of approximately 99 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

12. A hybrid maize plant according to claim 2, wherein the genetic material of said plant contains one or more transgenes.

13. A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 12 as a source of said breeding material.

14. The maize plant breeding program of claim 13 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

15. A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 12, said maize plant capable of expressing a combination of at least two 37Y15 traits selected from the group consisting of: excellent yield potential, strong stalks, strong roots, good silage yield potential, suited to the Northcentral region of the United States, and a relative maturity of approximately 99 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

16. A hybrid maize plant according to claim 2, wherein the genetic material of said plant contains one or more genes transferred by backcrossing.

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17. A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 16 as a source of said breeding material.
18. ~~The maize plant breeding program of claim 17 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.~~
19. A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 16, said maize plant capable of expressing a combination of at least two 37Y15 traits selected from the group consisting of: excellent yield potential, strong stalks, strong roots, good silage yield potential, suited to the Northcentral region of the United States, and a relative maturity of approximately 99 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.
20. A maize plant, or its parts, having all the morphological and physiological characteristics of the plant of claim 2.
21. ~~The maize plant of claim 20 wherein said maize plant is male sterile.~~
22. A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 20 as a source of said breeding material.
23. ~~The maize plant breeding program of claim 22 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.~~
24. A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 20, said maize plant capable of expressing a

combination of at least two 37Y15 traits selected from the group consisting of: excellent yield potential, strong stalks, strong roots, good silage yield potential, suited to the Northcentral region of the United States, and a relative maturity of approximately 99 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

25. A hybrid maize plant according to claim 20, wherein the genetic material of said plant contains one or more transgenes.

26. A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 25 as a source of said breeding material.

27. The maize plant breeding program of claim 26 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

28. A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 25, said maize plant capable of expressing a combination of at least two 37Y15 traits selected from the group consisting of: excellent yield potential, strong stalks, strong roots, good silage yield potential, suited to the Northcentral region of the United States, and a relative maturity of approximately 99 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

29. A hybrid maize plant according to claim 20, wherein the genetic material of said plant contains one or more genes transferred by backcrossing.

30. A method for developing a maize plant in a maize plant breeding program using plant breeding techniques, which include employing a maize plant, or its parts, as a source of plant breeding material, comprising: obtaining the maize plant, or its parts, of claim 29 as a source of said breeding material.

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~~31. The maize plant breeding program of claim 30 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.~~

~~32. A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 29, said maize plant capable of expressing a combination of at least two 37Y15 traits selected from the group consisting of: excellent yield potential, strong stalks, strong roots, good silage yield potential, suited to the Northcentral region of the United States, and a relative maturity of approximately 99 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.~~

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